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THE NEW YORK
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RUFUS PORTER, EDITOR.

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☞ *See Advertisement on last page.*

The Fashionable Lady's Prayer.

"Give us this day our daily bread,"
And pies and cakes besides,
To load the stomach, pain the head,
And choke the vital tides,
And if too soon a friend decays,
Or dies in agony—
We'll talk of "God's mysterious ways,"
And lay it all to thee.

Give us, to please a morbid taste,
In spite of pain and death,
Consumption-strings around the waist,
Almost to stop the breath;
Then, if infirmity attends
Our stinted progeny—
In visitation for our sins,
We'll lay it all to thee.

Give us big bustles in the rear,
(We ask it not in fun,)
A thing for corn-fed crows to fear,
And hens to roost upon;
And if we heat the hips and spine,
What matter should it be?
(And sickness follows,) we can whine,
And lay it all to thee.

Give us good houses, large and tall,
To look the cabins down—
And servants dodging at our call;
And shaking at our frown;
The poor, however worthy they,
We'll treat quite scornfully—
Then sixpence pay, communion day,
And settle up with thee.

We do disdain to toil and sweat,
Like girls of vulgar brood!
Of labor, give us not a bit,
For physic nor for food;
And if, for lack of exercise,
We lack the stamina
Of those we trample and despise—
We'll lay it all to thee.

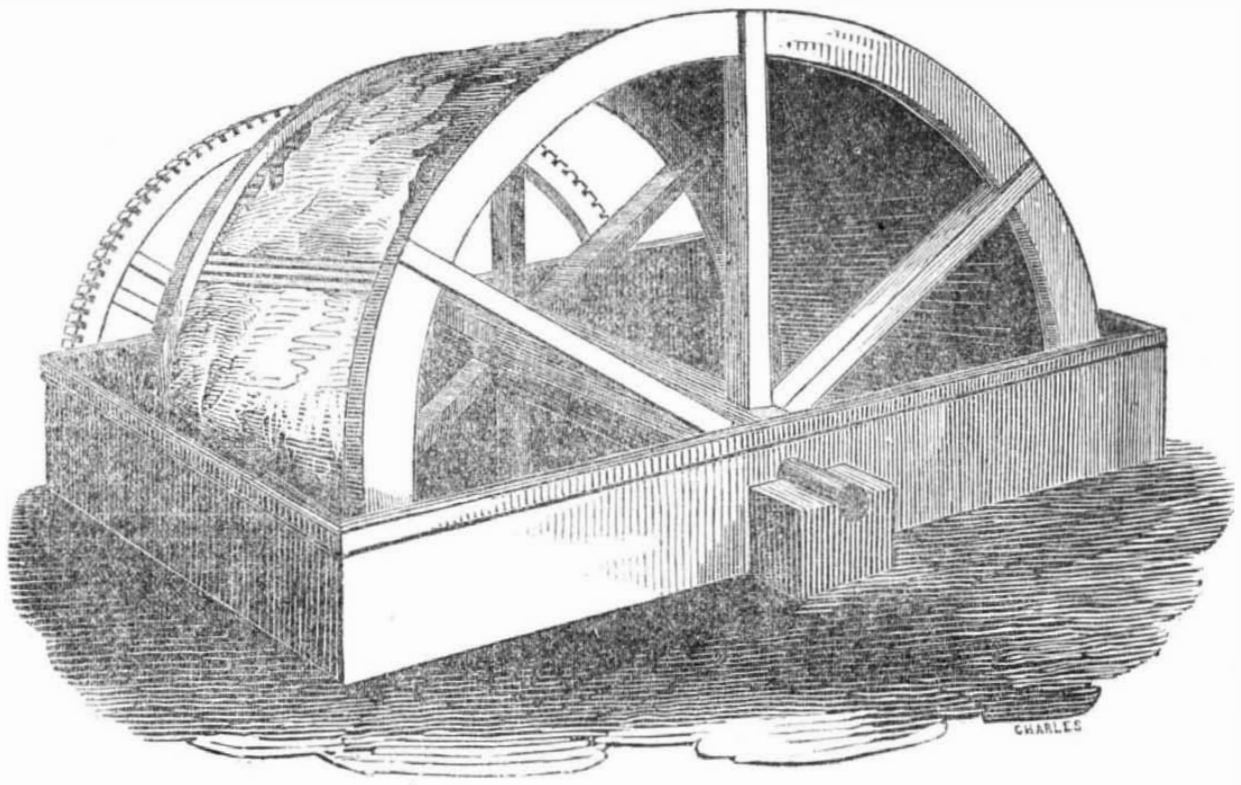
If any curse we have forgot,
That on a votary
Fashion let fall, withhold it not,
But send it grievously;
And if too hard the mill-stone light
For frail humanity—
We'll never blame ourselves a mite,
But lay it all to thee.

Yes, give us coffee, wine and tea,
And hot things introduce,
The stomach's warm bath trice a day,
To weaken and reduce!
And if defying nature laws,
Dyspeptic we must be,—
We scorn to search for human cause,
But lay it all to thee. [Chronotpye

California Farming.

A gentleman, writing from California to the editors of the St. Louis Reveille, says his stock consists of about four thousand head of oxen, one thousand seven hundred horses and mules, three thousand sheep, and as many hogs.—They all pasture themselves without difficulty in the rich prairies and bottoms of the Sacramento, and only require to be attended. This is done by Indians, of whom he employs four hundred. His annual crop of wheat is about twelve thousand bushels, with barley, peas, beans, etc. in proportion.

HOWELL'S TANNING MACHINE.



This machine, which attracted much attention among the various improvements exhibited in operation at the great Fair, has been satisfactorily proved by practical use, and we have on hand a variety of specimens of leather, tanned with extraordinary expedition by means thereof. It consists principally of a large wheel, with a series of floats attached to the periphery thereof, put in operation by suitable connections of machinery, and which, when in operation, keeps in motion a large number of skins in process of tanning, whereby the process is so greatly facilitated as to save three-fourths of the time required by the ordinary method: and it is stated that a great saving in bark, or tanning material, is also effected. A machine of the ordinary size will tan from two to three hundred sides of sole leather in a month, or the same number of calf skins in a week; and the leather tanned by this process is evidently stronger and of a better quality otherwise, than that produced by the ordinary process. One of these machines may be seen in operation at the store of Mr. B. Marsh, No. 16 Jacob street, New York.

A Strange Mistake.

A few days ago, a Newcastle journal says: "While a number of persons were engaged in harvest, working a field near Belford, the steward put off his waistcot to assist in binding, and placed it on the top of some sheaves, following the reapers down the field in the usual course of their work, till they were quite out of sight of the clothes. Two persons, a mason and his wife, who were going to employment on the railway, as they were travelling on the road adjoining to the field, observed one of the "navvies" go over the fence into the cornfield, strip off his own waistcoat, put on the one lying on the sheaves, and instantly run off at a quick pace. The two persons informed the reapers of what had taken place, and on coming to the spot where the waistcoat had been left, the steward found a ragged article lying in its place, and being afraid to touch it with his hands, took it up on the point of a sickle, and was dangling the rags about, to the amusement of his fellow laborers, when, to his great surprise, three sovereigns fell out of one of the pockets, and this, of course, reconciled him to what he at first thought a worthless exchange, and checked the jeering and sport of his companions. A short time after the discovery of the money, the poor 'navvy' returned with a penitent look, imploringly lamenting his 'mistake;' but he was told he had the bargain of his own making, and he must now keep what he had got."

Phrenology.

An exchange recommends that the science of Phrenology be brought into requisition in the selection of partners in matrimony; to this another expresses anticipation of the time when the reply to the "popped" question will no longer be "I must refer you to Pa," but "Let me examine your bumps." Think of the burning suspense of a youth while his head is undergoing the family examination.

A LIST OF PATENTS

Issued from the 8th of August to the 20th of August, 1846, inclusive.

To Levi Kettinger, of East Greenville, Ohio, for improvement in Rat Traps. Patented 8th August, 1846.

To Alfred Stillman, of New York City, for improvement in Machinery for Crushing Sugar Cane. Patented 8th August, 1846.

To George E. Waring, of Stamford, Ct., and R. F. Peterson, of New York, (administrators of Alexander S. Wolcott, deceased,) and John Johnson, of New York, for improvement in Machinery for Spinning. Patented 8th August, 1846.

To William Laighton, of Portsmouth, N. H., for improvement in Enema Chairs. Patented 8th August, 1846.

To Ovando Hurlbut, of Buffalo, N. Y., for improvement in Truss Pads.. Patented 8th August, 1846.

To Patrick S. Devlan, John Hancock and Cheselden S. Wood, of Philadelphia, Pa., for improvement in Oiling Gudgeons. Patented 8th August, 1846.

To Thomas A. Davies, of New York City, for improvement in Clocks. Patented 12th August, 1846.

To John Greenwood, John Mercer and John Barnes, of England, for improvement in preparing Stannate of Potassa and Soda. Patented 12th August, 1846.

To Joseph R. Morris, of New Haven, Ct, for improvement in Hot Air Furnaces. Patented 12th August, 1846.

To Edwin Thayer, of Chatham, N. Y., for improvements in Brakes for Cars. Patented 12th August, 1846.

To Bancroft Woodcock, of Wheeling, Va., for improvement in Cooking Stoves. Patented 12th August, 1846.

To Frederick H. Bartholomew, of New York City, for improvement in Hydrants. Patented 12th August, 1846.

To Horace Childs, of Henniker, N. H., for improvement in Truss Bridges. Patented 12th August, 1846.

To Frederick Harbach, of Pittsfield, Mass., for improvement in Bridges. Patented 12th August, 1846.

To James Munsell, of Painted Post, N. Y., for improvement in Mortising Machines. Patented 12th August, 1846.

To Erastus B. Bigelow, of Boston, Mass., for improvement in Power Looms. Patented 18th August, 1846.

To John Dutton, of Aston, Pa., for improvement in the Manufacture of Ice. Patented 18th August, 1846.

To Smiley H. Sample, of Fayette, Mo., for improvement in Hemp Breakers. Patented 18th August, 1846.

To Edward G. Fitch, of New Orleans, La., for improvement in Life Preservers. Patented 18th August, 1846.

To Thomas W. Harvey, of New York City, for improvement in Machinery for Dressing Screw Heads. Patented 18th August, 1846.

To William Clayton, of Marshalton, Pa., for improvement in Brakes for Carriages. Patented 18th August, 1846.

To Peter Amand le Comte de Fontaine Moreau, of London, England, for improvement in Barometers. Patented 20th August, 1846.

To John Needham, of New York City, for improvement in Sofa Bedsteads. Patented 20th August, 1846.

To Thomas J. Sloan, of New York City, for improvement in Wood Screws. Patented 20th August, 1846.

To George Tiemann, of New York City, for improvement in Sacrificators. Patented 20th August, 1846.

RE-ISSUE.

To Jordon L. Mott, of New York city, for improvement in Stoves. Original Letters Patent, dated 30th Dec., 1833; Re-issued 8th of August, 1846.

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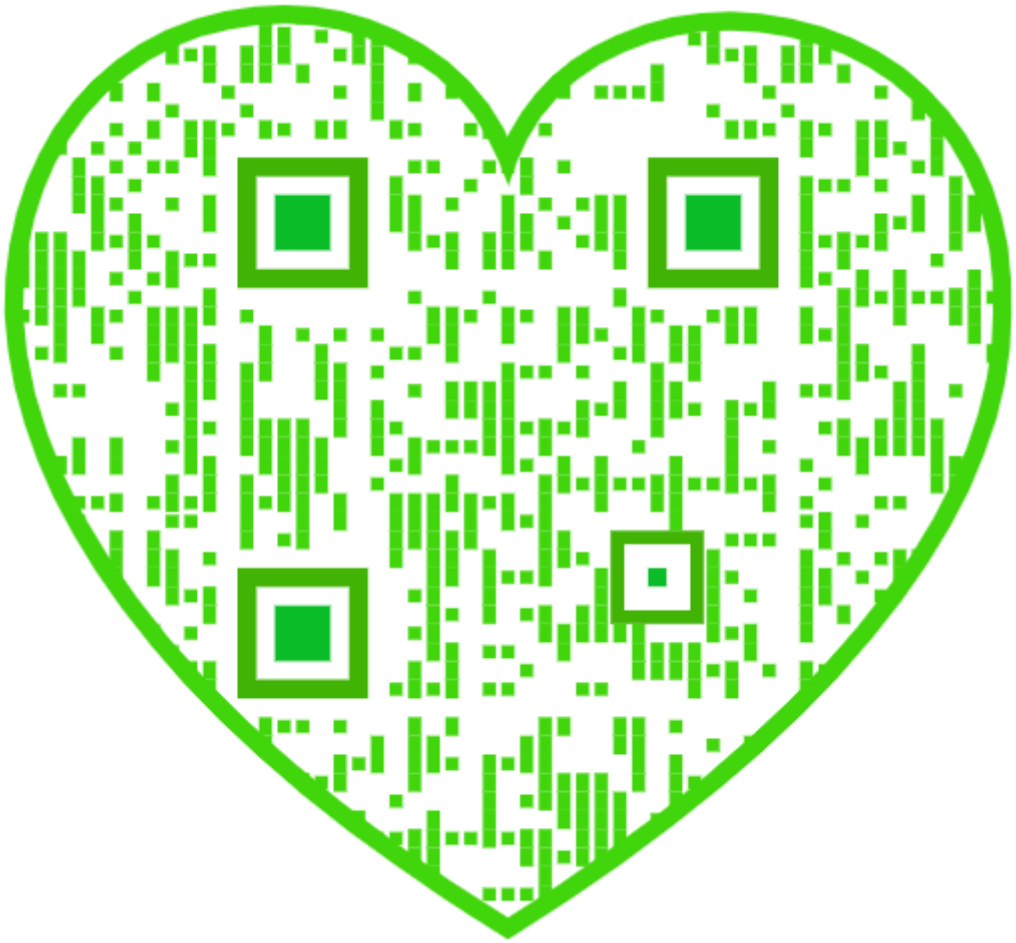

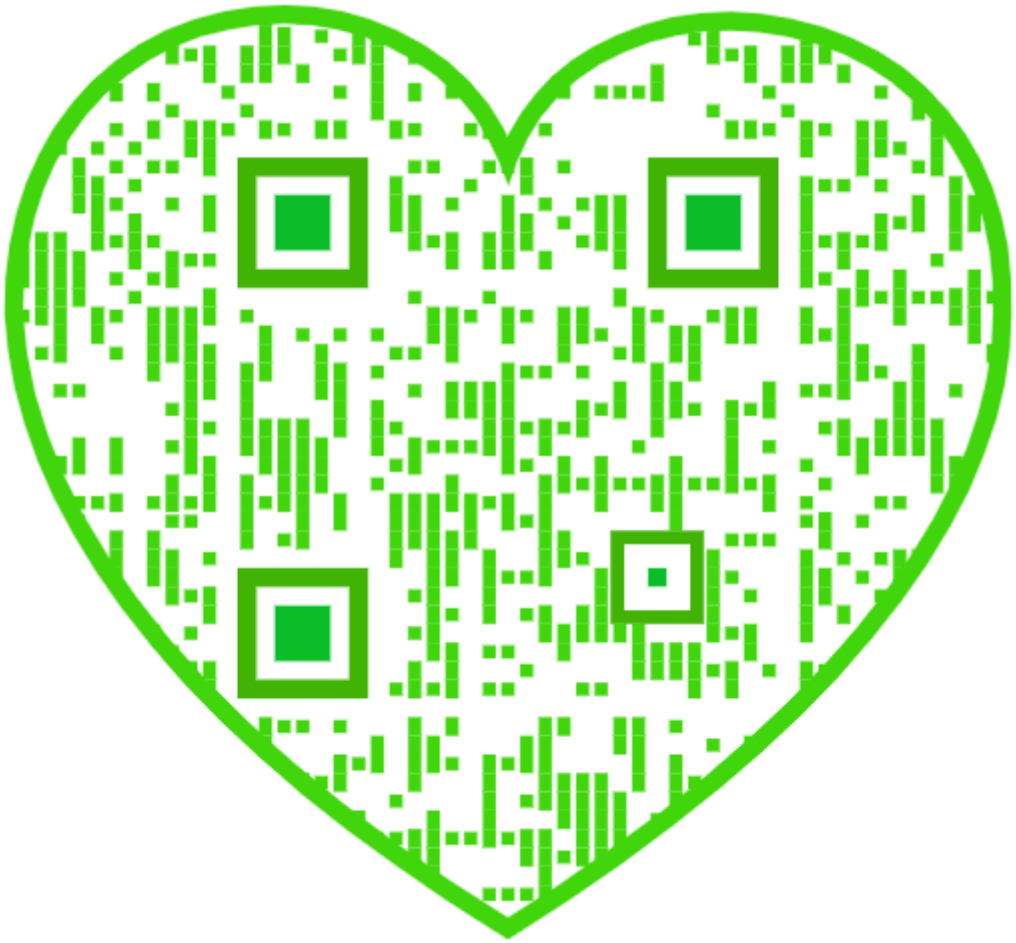

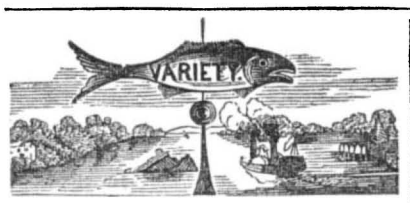

The Dial of Time.

Suggested by a wrought watch-case, presented by a Lady.

"My thanks" for the present were instantly spoken,
(The giver I never had seen,)
For Confidence whispered—accept of the token,
And look the envelope within;
I took off the wrapper, and judge my surprise
An Horologe case to behold,
Most splendidly wrought in the richest of dyes,
And bordered with velvet and gold.
A "Harp" like a minstrel's with glistening chords,
Upon it in beauty was wrought;
A lesson—much plainer than teaching by words
To me this instruction was taught,
The "Harp" for a Poet to play his own rhyme,
And "Case" for suspending the Dial of Time.

My watch, though of silver with care did I place,
'Twas old, and a Swiss Dial, too,
Beneath an old mirror within its new case,
Then stretched on a sofa to view
The match I had made by the moon's pearly beam,
When Fancy my mind bore away
To sport with the muses, or else did I dream
Of strains of a far sweeter lay
Than Minstrel oft plays to his lady beloved,
Or serenades sing in a bower;
Asleep, or awake, by its notes was I moved,
And little I heeded the hour,
The "Harp" for a Poet to play his own rhyme,
Or "Case" for suspending the Dial of Time.

I sprang from the sofa—the vision was gone—
The "*tick*," of my watch could I hear,
But not from the "Harp" came a musical tone,
But still did my Present appear,
A "Harp," for a Poet to play his own rhyme,
And "Case" for suspending the Dial of Time.

[Olive Branch.

Runaway Slaves.

There is said to be much activity in and about Chicago, between runaway slaves from Missouri and Kentucky on one part, and the civil officers on the other; and many curious and deep laid games are played by both parties in their endeavors to outwit each other. Each class is in turn successful; many slaves escaping to Canada, while the slave-catchers make many successful nabs. Self-interest rather than principle is the main motive on both sides.

Treasure Found.

The Barnstable Patriot says that "two men belonging to Nantucket, discovered on the shores of that Island a few days since, after an unusually low ebb tide, a cask, the head showing itself a little above the surface of the water, and which they found, on extricating it from its bed, to contain 5,000 Spanish dollars! It is thought to be a part of the cargo of a brig wrecked at that place more than fifteen years ago."

The Earth.

The surface of the earth is 196,862,206 square miles, and its solidity is 259,726,930,-416 cubit miles.

The sea is to land, in round millions of square miles as 160 to 40, or as four to one.

The earth is according to the different measurements, 7912, 7917 and 7921 miles in diameter, and about 24.860 or 24,880 miles round.

The Teetotal Mechanic.

Under this title appears a new and very sprightly paper, published in Akron, Ohio, by Drew & Coggshall. We are well pleased with the paper, but would remind the worthy editors that of the *eleven* articles which were copied from our paper in No. 7, only *one* was credited.

Effect of Vegetable Diet.

Of the interesting inhabitants of Pitcairn's Island, in the Pacific, it is said that they live almost entirely on fruits and vegetables.—Their diet is very simple, yams constituting their principal food. They rise early, and take much exercise. Their strength and agility is so great that the most expert English sailors cannot match them at wrestling and boxing, carrying, weighing, &c. Sickness of any kind is rare among them.

Hired Help.

The factories and the tailor shops take up so many girls, that it is next to impossible for families to get help. Some are breaking up housekeeping, while others depend wholly upon themselves. As a remedy for this evil, if evil it may be called, let mothers train their daughters to work in the kitchen. It will not hurt them; but make them healthier and happier, and prepare them ere long for good housewives.—[Portland Tribune.

Humanity Triumphant.

We mentioned some weeks since that a little girl had been imprisoned in Canada, for plucking a single gooseberry from a bush by the side of a garden. We are gratified to learn that the father of the child brought a suit against the owner of the garden, which suit resulted in a verdict of $300 against him, for his cruelty to the child.

The town of Monterey.

This town now in the possession of General Taylor, is the capital of the State of New Leon It is on the Fernando river, about 220 miles from its mouth. It has well paved streets and mostly one story stone buildings. The population is about 12,000, and the city is situated on the main travelling route from the Rio Grande to the city of Mexico.

Printing 3000 years ago.

The Rev. Mr. Jamieson, who was for ten years a missionary in Thibet, preached in Dr. Swift's Church, Allegheny, lately. Mr. J. states that the art of printing has been practiced in Thibet for 3000 years. They can only print 3000 copies a day, however, from each form—so that if they were ahead of us in type, we are far ahead of them in press work.

Large Railway Train.

The Mining Jouanal says: "One of the largest trains probably ever seen, left the Rugby station recently. It consisted of 84 carriages, and was impelled by three of Stephenson's powerful six-wheeled engines. Its length extended to nearly half a mile, and the weight of merchandise, exclusive of the carriages, was upwards of 240 tons."

Education.

It is stated that in the United States one child in every 4 goes to school—in France one in twenty—in Poland one in seventy-eight—in Russia one in three hundred and sixty-seven, that one being a noble. In Prussia, every child is educated to some extent, though they are instructed in a variety of errors in addition to the use of letters.

The Indians in Texas.

An old squaw lately brought for sale, to the Texas Volunteer camp, two Spanish girls, starved nearly to death, and almost naked.—The Indians had murdered a whole family, except three girls, and wanted to sell them. The Texans liberated the girls, seized 15 or 20 Indians on suspicion, and determined to do justice in the matter. Right.

Died for Joy.

Don Manuel Agustin Heredia, the wealthiest man in Spain, was in great distress concerning the safety of a vessel he had dispatched to China. On hearing that his vessel had arrived at Malaga, on the 14th of August *with a cargo worth fourteen millions of dollars*, the Don fell and immediately expired.

Low and High Water.

A late Saint Louis paper states that the river was so low that the ferry-boats could not cross, while the Pittsburgh papers report ten feet water in the Ohio river at that place. The Connecticut has been lower than ever before known.

New Mode of Advertising.

A letter was recently received at the Fort Plain Post office, bearing the following superscription: "*Fort Plain to enny Jir harness maker who wants work.*" The writer depends of course on the Post Master to notify the journeymen harness makers of the presence of the letter.

An Oversight.

We do not like apologies: but would say to Mr. Holcomb, that the notice of his nail-making machine, was actually put in type two weeks since, but in the hurry of business was set aside on the galley and overlooked. If it does not appear in this number, we will try again.

Diseased Turnips.

It is announced that the turnips in England and Ireland are infected with disease similar to that of potatoes: and as this vegetable is raised in lare quantities, and much depended on for food, its failure is regarded as a serious calamity.

New mode of Pen-making.

We are informed that some Yankee has invented a machine whereby common quills are cut up into twenty pens each, which are used in a pen-holder in the manner of metallic pens We think it not unlikely that the plan will succeed.

Immense Emigration to the West.

The Milwaukie Gazette announces the arrival of the steamer Empire, thus: "She had 960 paying passengers on her list, and was filled with freight. About 475 passengers and 70 tons of merchandize, furniture, &c. were landed at this port."

Ship Railroad.

It is now said that a treaty has been made for the construction of a *railroad*, by an English and French company, to unite the Atlantic and Pacific, over to the Isthmus of Panama. This looks more rational than the canal project.

"Go it while you're young."

The Middletown papers contain the marriage of Master David Turner, of Palmero, Ct., aged seventeen, to Miss Almira Brown, of Liberty, aged fourteen,—after a courtship of five years.

A Poor Woman's Eloquence.

The other day we heard a poor Irish woman describe her love of children. She never tired of tending them, she said, and whenever she heard one cry, "*her heart cried with it.*"—[London Times.

A Distressing Circumstance.

A Mrs. Culver, of Edgar county, Ill., was recently bitten by a rattlesnake, during the absence of her husband; and having no children large enough to send to the neighbors for help, she died before any assistance arrived.

A Bursted Cloud.

The Huntington Globe speaks of the bursting of a cloud in Lewiston, by which three young ladies were drowned. A contemporary remarks that they have very thin-shelled clouds in that quarter.

The Late Storm.

We have accounts from various sections of the country, of much destructiou of property by the gale of last week. The telegraph between Hartford and Berlin, Ct., was broken in 17 places.

Deepest Artesian Well in the World.

In the Duchy of Luxemburg, a well is being sunk, the depth of which surpasses all others of the kind. Its present depth is 2,336 feet, nearly 984 feet more than that of a la Grenalle, near Paris.

Postage.

The number of letters mailed within the month of October last, was 1,993,387 in the free States, and 884,109 in the slave States.—The number mailed in Ohio during that month was, 203,303, and in Kentucky, only 74,133.

The women of Peru never, it is said, nurse their children when angry, for fear of imparting to them a choleric temperament.

How Very Long.

The New London Star, says that "a citron melon vine which sprung from a stray seed last spring, on the farm of Noah Chapman, Esq. grew to the enormous length of *fourteen hundred and forty feet*, and produced *forty-two citrons*."

Old Dover to the young Dovers.

The inhabitants of Dover, England, have issued a circular address to the several towns of that name in America, in which address much friendly regard is expressed. Dover, N. H., will probably answer.

Third growth of Pears.

Mr. William Rhood, of New Haven, has a tree that has produced the third growth of pears this season; the first crop was ripe on the first of August: the second on the 2nd of October, and the third is now ripening.

Much Deceived.

A person named *Much*, from Patterson, lately bought what purported to be a gold watch, at one of our city auctions, but he was Much vexed when he discovered it was only brass.

Snow Storm at Buffalo.

Buffalo had on Saturday morning last a wet and splashing storm, which wound up in a dismal snow storm.

The Organ of Trinity Church is the largest in the United States. The case is of solid oak in the Gothic style, the height of the organ is 52 feet, width 27 feet, depth 32 feet. It has 44 stops, and nearly 2500 pipes, the largest of which is 30 feet long. It was built by Mr. Henry Erben, of this city, and cost $15,000.

The Magnetic Telegraph from Buffalo to Toronto has been commenced. The distance will be 100 miles. Arrangements are making for the connection of Buffalo and Detroit by Telegraph.

Rev. Dr. Yore stated, at a late meeting in Dublin, that he had attended 120 criminals to the scaffold, and every one of them declared intemperance to have been the means which brought them to the ignominious death.

The pumps—eight in number—employed in supplying the Illinois canal, are 4 1-2 feet in diameter, with six feet stroke and capable of raising 13,000 cubic feet of water per minute.

The Arabians will not kill superannuated camels, because they are past service and useless, but feed and nourish them with particular care in consideration of past services.

A Norwich paper states that the drought has been so severe in that section lately, that it is difficult for the locomotive to keep up steam.

The Railroad bridge across the Connecticut river at Windsor Locks, was lifted from the piers and dashed upon the rocks below, by the gale last week.

The Magnetic Telegraph Company are about constructing a new line from New York to Philadelphia, and instead of the fragile copper wire, to use strong iron cords.

Snow fell to the depth of three inches at Auburn, on Saturday night. There was almost a snow storm at Albany about the same time.

A gentleman from Thomaston, Maine, represents the drought to be so severe that water has been brought from the neighboring ponds and sold for five cents a bucket.

One of our exchanges speaks of a cucumber, which measures five feet and ten inches in length, and weighs five pounds and seven ounces.

There is said to be *thirty-seven millions* of capital invested in railroads by the people of Massachusetts alone.

There is said to be a female in Bangor, who was born in Newbern, N. C., in 1742. She walks to church regularly every Sunday.

A false friend is like a shadow on a dial, which appears in fine weather, but vanishes at the appearance of a cloud.

There have been reported several cases of severe sickness occasioned by digging diseased potatoes. Better leave them in the ground.

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Information to persons having business to transact at the Patent Office.

Continued from No. 4.

INTERFERING APPLICATIONS.

SEC. 37. "Whenever an application shall be made for a patent, which, in the opinion of the Commissioner, would interfere with any other patent for which an application may be pending, or with any unexpired patent which shall have been granted, it shall be the duty of the Commissioner to give notice thereof to such applicants, or patentees, as the case may be; and if either shall be dissatisfied with the decision of the Commissioner on the question of priority of right or invention, on a hearing thereof he may appeal from such decision, on the like terms and conditions as are provided in the scale of applications for inventions not new; and the like proceedings shall be had, to determine which, or whether either, of the applicants is entitled to receive a patent as prayed for."—Act. of 1836, sec. 8.

CAVEATS.

SEC. 38. The law enacts, "That any citizen of the United States, or alien who shall have been a resident of the United States the year next preceding, and shall have made oath of his intention to become a citizen thereof, who shall have invented any new art, machine, or improvement thereof, and shall desire further time to mature the same, may, on paying to the credit of the Treasury, in manner as provided in the 9th section of this act, the sum of $20, file in the Patent Office a caveat, setting forth the design and purpose thereof, and its principal and distinguishing characteristics, and praying protection of his right, till he shall have matured his invention; which sum of $20, in case the person filing such caveat shall afterwards take out a patent for the invention therein mentioned, shall be considered a part of the sum herein required for the same. And such caveat shall be filed in the confidential archives of the office, and preserved in secresy. And if application shall be made by any other person, within one year from the time of filing such caveat, for a patent of any invention with which it may in any respect interfere, it shall be the duty of the Commissioner to deposite the description, specifications, drawings, and model, in the confidential archives of the office, and to give notice (by mail) to the person filing the caveat of such application, who shall within three months after receiving the notice, if he would avail himself of the benefit of his caveat, file his description, specifications, drawings and model; and if, in the opinion of the Commissioner, the specifications of claim interfere with each other, like proceedings may be had in all respects as are in this act provided in the case of interfering applications."—Act of 1836, sec. 12.

EXTENSION OF A PATENT BEYOND THE FOURTEEN YEARS.

SEC. 39. Section eighteen enacts, "That whenever any patentee of an invention of discovery shall desire an extension of his patent beyond the term of its limitation, he may make application therefor in writing, to the Commissioner of the Patent Office, setting forth the grounds therefor; and the Commissioner shall on the applicant's paying the sum of forty dollars to the credit of the Treasury, as in the case of an original application for a patent, cause to be published in one or more of the principal newspapers in the City of Washington, and in such other paper or papers as he may deem proper, published in the section of country most interested adversely to the extension of the patent, a notice of such application, and of the time and place when and where the same will be considered, that any person may appear and show cause why the extension should not be granted. And the Secretary of State, the Commissioner of the Patent Office, and the Solicitor of the Treasury, shall constitute a board to hear and decide upon the evidence produced before them, both for and against the extension, and shall sit for that purpose at the same time and place designated in the published notice thereof. The patentee shall furnish to said board a statement, in writing, under oath, of the ascertained value of the invention, and of his receipts and expenditures, sufficiently in detail to exhibit a true and faithful account of loss and profits in any manner accruing to him from and by reason of said invention. And if, upon a hearing of the matter, it shall appear to the full and entire satisfaction of said board, having due regard to the public interest therein, that it is just and proper that the term of a patent should be extended, by reason of the patentee, without neglect or fault on his part, having failed to obtain, from the use and sale of his invention, a reasonable remuneration for the time, ingenuity, and expense bestowed upon the same, and the introduction thereof into use, it shall be the duty of the Commissioner to renew and extend the patent, by making a certificate thereon, for the term of seven years from and after the expiration of the first term; which certificate of said board of their judgment and opinion as aforesaid, shall be entered on record in the Patent Office; and thereupon, the said patent shall have the same effect in law as though it had been originally granted for the term of twenty-one years; and the benefit of such renewal shall extend to assignees and grantees of the right to use the thing patented to the extent of their respective interests therein: Provided, however, That no extension of a patent shall be granted, after the expiration of the term for which it was originally issued.

FEES PAYABLE AT THE PATENT OFFICE.

SEC. 40. All fees must be paid in advance—the amount fixed by law; except in case of drawings, the expense of which will be communicated on application for the same.

SEC. 41. Every applicant must pay into the Treasury of the United States, or into the Patent Office, or into any of the deposite banks, a deposite to the credit of the Treasurer, on presenting his petition or application, as follows:—

SEC. 42. If a citizen of the United States, as a patent fee	$30 00
SEC. 43. If a foreigner, who has resided in the United States one year preceding the application for a patent, and shall have made oath of his intention to become a citizen	30 00
SEC. 44. If a subject of the Sovereign of Great Britain	500 00
SEC. 45. All other foreigners	300 00
SEC. 46. On entering a caveat	20 00
SEC. 47. On entering an application for an appeal from the decision of the Commissoner	25 00
SEC. 48. On extending a patent beyond the fourteen years	40 00
SEC. 49. For adding to a patent the specification of a subsequent improvement	15 00
In case of re-issues for every additional patent	30 00
SEC. 50. On surrender of an old patent, to be re-issued, to correct a mistake of the patentee	15 00
SEC. 51. For a disclaimer	10 00
SEC. 52. For copies of patents, or any other paper on file, for each 100 words	10

SEC. 53. For copies of drawings, a reasonable sum, in proportion to the time occupied in making the same.

SEC. 54. Communications to and from the Patent Office are free of postage.

SEC. 55. All fees under five dollars, if sent to the Commissioner of Patents, should be transmitted in specie.

SEC. 58. It is recommended to make a deposite in a specie paying deposite bank, of the fee for a patent or other application, and to remit the certificate. Where this cannot be done without much inconvenience, gold may be remitted by mail, free of postage, at the risk of the correspondent.

SEC. 57. In case of deposite made in the deposite banks, a duplicate receipt should be taken, stating by whom the payment is made, and for what object. The particular invention should be referred to, to enable the applicant to recover back the twenty dollars in case of the withdrawal of the petition. The certificate of deposite may be made in the following form:—

SEC. 53. BANK OF

The Treasurer of the United States has credit at this office for dollars in specie, deposited by of the town of in the county of , and State of the same being for a patent [*or whatever the object may be*] for a steam-boiler.

List of Banks which are authorized to receive Patent fees on account of the Treasury of the United States, and to give receipts or certificates of deposite therefor, viz:—

Commercial Bank, Portsmouth, N. H.
Bank of Montpelier, Montpelier, Vt.
Merchants' Bank, Boston, Mass.
City Bank, New Haven, Conn.
Arcade Bank, Providence, R. I.
Farmers' and Mechanics' Bank, Hartford, Ct.
Mechanics' and Farmers' Bank, Albany.
Albany City Bank, Albany.
Bank of Commerce, New-York, N. Y.
Bank of America, "
American Exchange Bank, "
Merchants' Bank, "
Commercial Bank, Albany, "
Philadelphia Bank, Philadelphia, Penn.
Exchange Bank, Pittsburgh, "
Bank of Pittsburg, Pittsburgh, "
Bank of Baltimore, Baltimore, Md.
Bank of Washington, Washington, D. C.
Bank of the Metropolis, Washington, D. C.
Bank of Virginia, Richmond, Va.
Exchange Bank of Virginia, Norfolk, Va.
Southwestern Railroad Bank, Charleston, S.C.
Branch Bank of Cape Fear, Raleigh, N. C.
Planters' Bank of Georgia, Savannah, Ga.
Bank of Mobile, Mobile, Alabama.
Branch Bank of Alabama, Huntsville, Ala.
Bank of Louisana, New-Orleans, La.
Union Bank of Tennessee, Nashville, Tenn.
Louisville Savings Institution, Louisville, Ky.
The Ohio Life Insurance and Trust Company's Bank, Cincinnati, Ohio.
Clinton Bank, Columbus, Ohio.
Bank of Missouri, Saint Louis, Mo.
Michigan Insurance Company, Detroit, Mich.
Union Bank of Louisiana, New Orleans, La.

Any person wishing to pay a patent or other fee, may deposite it with either of the banks above named, and forward the receipt or certificate to this office, as evidence thereof.

Money sent by mail must be at the risk of the person sending the same.

SEC. 59. N. B.—The Patent Office does not make original drawings to accompany applications for patents, and furnishes copies of the same only after the patent is completed.—Draughtsmen in the city of Washington are always ready to make drawings at the expense of the patentees.

(*To be continued.*)

Lake Ontario.

We find by actual and accurate admeasurement, that the water off our wharves at Kingston this day, 26th of September, 1846, is three feet five inches lower than it was in 1835.—This involves consideration of deep importance to our navigation, and of course affecting our new Canals.

It is a well known fact, that as a country becomes cleared and open to the influence of the sun and air; that by the action of evaporation, all rivers diminish, hence the many instances in the old country where valleys, which have formerly been the channel of important rivers, are now become dry—or mere streamlets during the wet seasons.

It is not difficult to imagine that from the same or similar causes, our magnificent rivers may gradually get more and more shallow; nor is this a circumstance which ought to have been overlooked in the construction of our canals. We shall on some future occasion give some striking instances on this subject, which have come under our own notice in Canada.—[Kingston, Upper Canada Paper.

From Lake Superior to the Mississipi.

An exploring party, says the Galena Gazette, passed down the Mississippi last week. They measured the distance from Fon du Lac to the mouth of Snake River, and found the distance only to be 43 miles. Snake River falls into the St Croix about 30 miles above the falls of the latter, which would make the distance only about 70 miles from the head of steamboat navigation on the St. Croix, to one of the best harbors on Lake Superior. The character of the country is said to be such that a good road may easily be constructed between the two points. This will at no very distant day, be a great thoroughfare between the Mississippi valley and that of Lake Superior.

The Louisville papers are warmly advocating the establishment of a regular line of steam-packets between that city and Pittsburgh.

RAILROAD INTELLIGENCE.

Pittsburgh and Connellsville Railroad.

We are informed that the Chief Engineer, Mr. Lathroe, will, on Monday next, proceed to make a careful reconnoisance of the country to Turtle Creek, in order to make a proper selection of the route from that place to this city; and provided the season should prove favorable, it is expected the Engineer Corps will have the line from there to Connellsville ready for letting before the winter season.—[Pittsburgh Gazette.

Michigan Central Railroad.

Jas W. Brooks, the superintendent of this road, under the new organization, is in this city on business connected with the road. He has just completed a contract, in New Jersey and Pennsylvania, for a thousand tons of heavy T rails—sufficient for one hundred miles of road. Fifty miles of the eastern section of the road will be relaid within six months; and the whole work completed through to Lake Michigan within two years.—[Alb. Eve. Jour.

Atlantic and St. Lawrence Railroad.

A correspondent says "You will observe that this road, both in Maine and Canada, is now in course of construction. By the 1st of November next, there will be 60 miles under contract, there being 30 miles at the Montreal end, and the same distance extending from Portland into the interior. The friends of the road are preparing for a vigorous prosecution of the work, and its further extension into the interior from both termini."—[R. R. Journal.

The Northern Railroad.

The rails are now laid more than four miles north of Concord depot. A locomotive, the "Jehu," has been placed on the road, and is constantly employed in drawing cars loaded with iron, &c. The whole line of Franklin is making great progress, and will no doubt be completed by early winter.—[Concord (N. H.) Courier.

Worcester and Nashua Railroad.

A very large meeting of the Stockholders and friends of the enterprise was recently held at Worcester for the purpose of devising means for completing the work. The Directors submitted a very full and satisfactory report of the condition of the road, together with several propositions, one of which was, that the corporation proceed at once to put the road under contract, trusting to future efforts for the necessary subscription. The meeting was nearly unanimous in favor of this proposition; and if the Norwich and Worcester Company are reasonably disposed to encourage this enterprise, it will soon be pushed forward to completion.

The Ten Tribes.

The Jews at Jerusalem are said to have received a letter from the synagogue authorities of Sapheth, which speaks of important information having been received concerning the long lost ten tribes of Israel. They are represented to have gone many months travel into the desert, where they still reside, a powerful nation, "abounding in wealth and ammunition." Notwithstanding the absurdity of this report, the Jews earnestly propose sending a mission to find out the whereabouts of this nation. It is a much more probable supposition that they mingled with the world twenty three or four hundred years ago; and with this view it is rational to suppose that every man living on the earth at the present time, is a natural descendant of Abraham. Let us look at the subject. A moderate calculation will show that the descendants of every man form connections with five other families in 50 years, on an average. By this rule connections would be formed with 25 families in 100 years;—125 in 150 years; 625 in 200 years. At this rate it will be seen that in the comparatively short term of 600 years, the descendants of one man will form connections with 245,028,625 different families. There has been an intercourse between the neighboring nations and tribes through Asia and Africa as well as Europe, within 2000 years sufficient to justify the position that the descendants of the lost tribes have long since intermingled with all nations of the earth.

It is stated that Santa Anna has on his several farms from 40,000 to 50,000 head of cattle.

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NEW INVENTIONS.

The following are the claims of inventors to new inventions and improvements recently entered at the Patent Office, but of which we have no means of giving any definite description at present:—

BY WILLIAM H. PASSMORE.
7th Oct., 1846.

Improvement in Tempering Furnaces.

What I claim is the combination of the preparing case, or cover, with the heating furnace heretofore employed, the said preparing oven being formed and combined with the furnace.

—

BY ORLANDO OWEN.
7th Oct., 1846.

Improvement in Apparatus for constructing Cisterns.

What I claim is the combination of the segment curve with the arm, ferule and standard, combined with the sector for forming the arched top of the cistern.

—

BY H. B. MASSER.
7th Oct., 1846.

Improvement in Washing Machine.

What I claim is the combination of a dasher having a valve therein, with a wash board and side pieces so arranged as to allow the water forced up by said dasher, in part to pass around behind the same.

—

BY JOHN GOLDENBURG.
7th Oct., 1846.

Improvement in Fireplace Grates.

What I claim is the combination of the damper with the descending flues behind the front plate and dampers, connected with the grate.

—

BY JAMES MURRAY.
7th Oct., 1846.

Improvements in Corn Shellers.

What I claim is the employment of the guard of leather, or other flexible material, for the purpose of preventing the escape of the corn with the cobs, and the choaking of the machine by the insinuation of chaff and dirt into the moving parts thereof.

—

BY JONATHAN W. GORDON.
7th Oct., 1846.

Improvement in Corn Shellers.

What I claim is the revolving spring arms, having segments of screws on their ends for drawing in the cobs through, and teeth for shelling the corn from the cob, and in combination therewith, the jaws for holding the ear of the corn, to prevent its turning while being shelled.

—

BY RENE L'ANGLAIS.
7th Oct., 1846.

Improvement in Lightning Conductors.

What I claim is the manner of constructing the glass isolaters with shoulders and cylindrical recesses, in combination with the frame and rod.

—

BY STUART PERRY.
7th Oct. 1846.

Improvements in Gas Engines.

What I claim is first surrounding the cylinlinder and induction passages of an engine operated by the explosion of gases, with water, for the purpose of keeping it at the requisite temperature. Second, cooling and lucubrating the inside of the cylinder and piston of an engine operated by the explosion of gases, by injecting water within the cylinder, in whatever manner effected. Third, cooling and lucubrating the piston rod and stuffing box of an engine, operated by the explosion of gases, by injecting water around the piston rod and within the stuffiing box. Fourth, the method of inflaming the explosive mixture in the cylinder or in the induction passage by means of heated platina, or other metal having like properties, and provided with a valve or valves by which the heated surface can be separated from the explosive mixture. And fifth, the combination of a receiver of condensed air filled by an auxilliary force, with the receiver into which air is forced during the action of the engine, for the purpose of starting the engine.

—

BY ISAAC SLACK.
10th Oct., 1846.

Improvement in Carriage Axles.

What I claim is the revolving axle, coming together, intersecting and elevated above the straight line of the centre of the wheels, in combination with a straight hole in one, and a tapering pin in the other, for the use and purpose set forth.

—

CUTTING & BUTTERFIELD.
7th Oct. 1846.

Improvement in Coupling for Rail Road Cars.

What we claim is the manner in which we connect and disconnect a car to and from the tender of a locomotive by means of the jaws and the connecting tongue, the sliding gate, the lever, and fulcrum arm. We also claim the manner in which we connect the sliding gate of the coupling apparatus between the tender and the foremost car, to the sliding gates of the coupling apparatus between the remaining cars of the train, by means of the lever, the roller shafts, the connecting rod and lever combined.

—

BY ROGERS & HANCOX.
10th Oct., 1846.

Improvement in Stoves.

What we claim is the damper so connected with the openings or passages for a draft of air to the fire, and that which leads to the air chamber, as by one operation, to close, in whole or in part, the one, and in corresponding proportion to open the other. In combination with the inside bottom plate and hot air chamber, and inside top plate therewith connected for preventing condensation of steam, and for preventing explosion.

A very Valuable Invention.

Among the many valuable articles exhibited at the late Cattle Show in this town, we examined one which deserves an extensive notice. It was a new Parlor Stove, patented by Messrs. Laban Morse & Brothers, of Athol, in this county, and designed for the purpose of saving heat and fuel. The pattern we saw was similar to the modern style of parlor stoves, the improvement in its construction, and which the inventor has just patented, consisting of a horizontal plate at the bottom, perforated with holes for a grate, and upon the centre of this grate, over a large hole some four or five inches in diameter, a hollow cone was placed, which rose to the height of 12 or 15 inches inside of the stove. This cone was also perforated with holes. Although the stove will burn wood and coal equally as well as the common stove, yet its great advantage lies in the fact that it will burn saw-dust, tan, chips, and other refuse fuel which exists so plentifully in manufacturing villages, and produce from such fuel, whether green or dry, a most brilliant and scorching heat. We saw one of the stoves in operation on Friday, at No. 6 Front street, and were surprised at the intense heat which it produced from a small quantity of apparently worthless tan, and we were informed by the proprietor that his invention will produce as much heat from *one* cord of such fuel, as is usually obtained from *two* cords of wood consumed in the common stove, There is also a great saving of heat from the consumption of gas, which is accomplished by means of the extraordinary draft from the perforated cone in the centre of the stove, and from which the flame, after the fire has been kindled upon the *top* of the fuel, is infused through the whole mass. The expense of the stove is about that of the ordinary stoves now in use. We understand negotiations are in progress for an agency to be established in this town —[Worcester Farmer and Mechanics' Leger.

Extraordinary Discovery.

We are happy to be able to announce that the long sought art of printing with Daguerreotype plates has now been discovered and brought to a degree of practical perfection, by Prof. Plumbe. We have seen a variety of portraits executed by this art, and are gratified with the correctness of axpression, and anticipate the introduction of the art to extensive use.

Improved Carriage Steps.

D. & E. Z. Little have applied for a patent for carriage steps, so constructed as to be turned under the carriage when not in use, and remain in whatever position they may be placed. Entered Oct. 7th.

Swelled Rails and Concave Tires.

We have for some time entertained the opinion that rail-car wheels made with a hollow groove in the periphery thereof, and running on a rail with a round or swelled surface, would have several advantages over the common flanged wheel on flat rails; but a series of experiments recently made by Mr. C. H. Greenhow, as commuuicated to the Railroad Journal, shows a greater advantage in favor of the swelled rail, with regard to freedom of motion, or absence of frictional resistance, than we had expected. It is proved by these experiments, that a car mounted on the hollow tire wheels and the swelled rails will run twice as far by an equal impetus, as one mounted in the ordinary way. Add to this that the safety of cars from accident by running off the track when mounted in this manner, is more than double that of the common fashion, and it plainly shows the true policy of all railroad companies to be the adoption of the round or swelled rails. The cut at the head of this article is an illustration of the principle recommended

Improvement in the Piano Forte.

The following notice of an improvement invented by Mr. Lemuel Gilbert of Boston, was written by Mr. E. Hamilton, of this city.

GRAND ÆOLICHORD.—Among all the attempted improvements in the construction and capabilities of the Piano Forte, none seems to deserve so much attention as that designated by the above name. It consists in an additional string to each note of the common piano, tuned an octavo lower. This string being of different length and thickness from those sounding the same pitch, necessarily gives forth a different quality of tone, and the effect is widely different from that arising from striking the keys in octaves on a common instrument. It is so contrived that this third string may be made to sound or not at pleasure, so that you have the common piano when you choose. The improvement is entirely unlike the Grand Piano Forte, which has three equal strings to each note, and the effect produced resembles very nearly that of the dulcina and flute of the organ, or the hautboy and flute of the orchestra playing in octaves. In fact it so multiplies the resources of expression, and adds so much positive beauty and power, that the piano with the Grand Æolichord becomes not only a new but a most magnificent instrument. A march played upon this piano has the effect of a full band. The attachment is not any more liable get out of tune or out of order than the rest of the instrument. In fact it is difficult to imagine a greater combination of musical capability in any instrument suited to the parlor and played by one person, than a Piano Forte of Lemuel Gilbert's manufacture, with his patent action, and with the improvement of the Grand Æolichord.

Improved Windlass for Wells.

This invention consists of two cylindrical drums on one axle, and to each drum is attached a rope by which a bucket is suspended: or a bucket may be connected to one rope, and a counterpoise weight to the other: the two ropes being coiled on the drums in opposite directions, and the two drums being clutched together, so that the ropes may be shortened or lengthened, according to the height of the water within the well, by merely adjusting the relative positions of the drums. This is an excellent invention, and should be extensively known. Invented by Harvey W. Sabin, and entered Oct. 10th.

Improvement in Cooking Stoves.

This improvement was entered Oct. 7th, by Wm. B. Treadwell, and consists of a horizontal plate between the oven and the top of the stove, whereby the space over the oven is divided into two distinct flues, one of which conducts the smoke directly to the smoke pipe, and the other to the space surrounding the oven; both being regulated by dampers.

Horse-Shoe Nail making Machine.

Jedediah Holcomb, Esq. of Brandon, Vt. has secured a patent on a machine, or rather, combination of machinery, for the manufacture of the best of nails for the use of horse-shoers, as well as malleble board and finishing nails.—We view this invention as one of unusuat importance, being of that class which is calculated to effect a decided revolution in more than one important branch of industry. We cannot describe the machinery without the use of very expensive engravings, but the principles of operation we shall give in brief. The best of iron, carefully selected, is rolled into long plates 10 to 18 inches wide, and these are cut crosswise into strips 1 1-4 inch in width.—These strips are then subjected to cylindrical swedges, whereby the shape of the nail-head is formed on both edges of the plate, so that being cut into nails by the ordinary alternating process, the nails are nearly completed, and only require a slight amount of finishing. Mr. H. has new and original machinery for every part of the process, and we can see no reason why his enterprise should not be crowned with complete success.

Improvement in Fire Engines.

What constitutes the peculiarity of this invention is the arranging of an air vessel between the eduction pipes of a double acting force pump, and the formation of a connection between the air chamber and the eduction pipes by means of two pipes inclining in the direction of the issuing columns of water, whereby the escape of air from the air chamber is prevented, and the elastic force of the air exerts a more direct force on the column. The discharge pipe is moreover furnished with internal wings by means of which the whirling motion of the water is prevented, and a more solid column obtained than by any other mode in use. Invented by Charles W Grannis, and entered Oct. 7th.

India Rubber Camels.

An experiment was made at East Boston this forenoon, by Capt. S. W. Taylor, the inventor of the sub-marine armour, in order to exhibit the power of the "rubber camels."—The camels consist of India rubber bags, strongly enclosed in canvass, and are intended to be used for the purpose of raising sunken vessels. Each bag will hold, when inflated, about two hundred and eighty square feet of air. They are inflated, after being placed in their proper position, by air pumps worked by steam. The hose through which the air is conveyed to the bags, is of India rubber.—From the result of the experiment, to-day, on a loaded ballast lighter, we are led to believe that these "camels" will prove valuable for the purpose for which they were intended.—]Mer. Journal, 12th.

Improvement in Warming Cars.

Mr. T. Townsend of Albany, has patented an invention by which all the cars in a train may be effectually warmed by means of hot air condensed from the furnace of the locomotive.—This is done by means of elastic tubes ingeniously united by joints, which connect with air-chambers in each car. Danger from fire avoided, and the cost of fuel, stoves and attendance, is all saved.

Improved Lanterns for destroying Insects.

Mr. Samuel C. Hill has invented a lantern, consisting of a funnel shaped glass case, within which a small lamp is adjusted over a basin of oil or other liquid, in such a manner that moths or other insects, in approaching the light, will be very sure to be precipitated into the oil below. It is particularly intended for the protection of bees against the bee-moth.—Entered at the Patent Office Oct. 7th.

Improved Mould for Castings.

Francis N. Still has applied for a patent for an improvement in making moulds by means of impressions taken in plaster of Paris. His method is to make the first patterns of wood, and impress the figures and ornamental parts thereof upon plaster, from which other impressions are taken for other patterns. Entered Oct. 7th.

A new kind of broom made of different materials from those now in use, has been invent- by Dr. S. Andrews of Perth Amboy. It is said to be an excellent invention.

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NEW YORK, OCTOBER 24, 1846.

Water Power.

There are hundreds of mills and manufacturing establishments situated on small streams the water of which in a dry season is insufficient to keep them in operation; yet in four-fifths of those cases there would be a plentiful supply of water to continue the operation of the machinery, if the water was economically used. It would be well for the proprietors of such works, to acquaint themselves with the philosophy and true theory of water power, and adopt such modes of applying and using the water, as judicious economy requires.—All undershot wheels, re-acting wheels and tub-wheels, should at once be abandoned: for the fact has long been established, that at least twice as much power may be obtained from the descent of water, acting by its weight, as can be derived from its force or momentum, acting on the plain surface of flat boards.—The only true principle of using water economically, is either to allow it to descend moderately while contained in the buckets of a wheel, or to so confine and restrict it, that it cannot escape but by the motion of a wheel or a hydraulic engine. The overshot is the best in common use, but is subject to two objections; one of which is that the water must be always received from an uniform height, and if the surface of the water in the reservoir chance to be above this point, there is a proportionate loss of power occasioned; the other objection is that another loss of power is occasioned by the spilling of the water from the buckets, before it reaches the bottom of the wheel, or the surface of the water below. This last objection may be in some manner remedied by casing up the lower part of the wheel, very close to the outward edges of the buckets, thus preventing the escape of the water from the buckets till it reaches the bottom. There are several kinds of chain-wheels or chain-bucket water wheels, which are nearly equal to the overshot wheels, and are somewhat cheaper though more complicated, and liable to become impaired; but if a wheel—even a small horizontal wheel,—be so constructed that the water, being conducted to the wheel by a close box flume, cannot escape but by the motion of the wheel, nor any faster than the wheel moves, all of the objections to which other water-wheels are subject are evaded, and the whole power of the water may be used, and without any perceptible loss or waste, whatever may be its height or descent. A wheel of this description has been constructed and brought apparently very near perfection, and can be afforded much cheaper than the common overshot wheel. This also has the advantage of running under water, and is consequently secure from the effects of frost or of back water. Yet this wheel, though not expensive, is difficult of construction, and requires much scientific accuracy of workmanship. This wheel is called the double-acting Parallel Water Wheel, on account of certain peculiarities in its construction:—the water acting on opposite sides of the wheel at the same time, and the floats or buckets constantly retaining positions parallel to each other. A small brass wheel of this construction is in operation in this city, and an operating diagram illustrative of the principle and construction thereof, may be seen at this office.

Influence of Rail Roads on the Weather.

The well known natural philosopher, Dr. August, makes the following communication in a Berlin Journal on the "Influence of Rail Roads on the Weather." When an extended portion of the earth's surface is brought by a net of rail road track into connection of electrical conductors, the accumulation of electricity in the lower part of the atmosphere is prevented, as the iron tracks effect a constant electrical equilibrium between remote regions. By this means, a violent storm is rendered unlikely and if one should arise, it will undergo a continual if not a considerable diminution. Doubtful as the theory of storms may be, so much is certain, that their origin is in the effort of nature to produce an equilibrium of opposite electricities, and that they break out with the more violence the greater the intensity of the opposition, which is produced beforehand by chemical processes that accompany evaporation. If one of these opposites, the electricity of the lower atmosphere for instance, is conducted away to other regions, the variation of the two is made less and the violence with which the equilibrium is established is diminished. By being thus conducted away, the influence is lessened which the electricity of the lower atmosphere has on the clouds, and by which it attracts its opposite, thus accumulating storm and clouds on the electrical point. For this reason, in a level country where there are nets of railroads, a storm cannot acquire that force of opposite electricity and produce that heaping up of clouds which is possible where these conductors are wanting. For some years past the writer believes that he has observed a change in the storms of this place, and asks the attention of students of natural philosophy to the proof of his hypothesis. It is a fact that since Berlin has become the focus of several rail roads, there have been no violent storms, and all that have risen have had a rapid and gentle termination.—[Schnellpost.

Submarine Travelling.

The greatest, and apparently most insurmountable difficulty, which attends submarine surveys, consists, not so much in obtaining the requisite atmospheric air, as in sustaining the pressure of the water. The use of the *diving bell* is generally understood. It is a heavy inverted tube, or bell shaped vessel, which, being filled with atmospheric air, one or more persons may remain dry in it at a depth of twenty or thirty feet below the surface of the water. But the persons thus descending, are not exempt from pressure, according to the height of the water above them: for although they are surrounded by air, this air is compressed by the weight of the water above, which renders an existence in it difficult and uncomfortable, even at a moderate depth. To evade this difficulty, an experiment has been made, and with partial success, with a water proof dress, constructed on a jointed iron frame, of hoops, and bands: but this plan cannot be considered safe, inasmuch as the cloth would be liable to be rent by an excessive pressure of water, which might produce instant death to the wearer. The plan adopted for the purpose of respiration is probably as judicious as any can be made. Two small elastic tubes lead from the apparatus to the atmosphere, above the surface of the water. Each tube is furnished with a valve, one of which opens upward, and the other downward. Both tubes are united at the bottom, in *one*, which the experimenter holds in his mouth, being thus enabled to draw fresh air at every breath. The only tolerable safe method which is presented, and by which a person may traverse the bottom of the sea to a great depth, is to enclose him in a close and strong metallic cylinder, with glass windows, proportionably strong.—To this cylinder may be attached a pair of small paddle wheels, the axles of each of which may pass through the side of the cylinder by a water tight bearing, or stuffing-box, and terminate by a crank, inside. If the apparatus is well adjusted, so as to bear but lightly on the bottom, the submariner may propel himself in any direction, by means of the cranks. Lamps may be so adjusted as to throw a strong light outside, through some of the windows, but without illuminating the inside. The apparatus must, of course, have a signal wire pass up through the top, to the attendants above water; and when the explorer makes any important discovery, he can make a signal to be drawn up, and those above can mark the place, by sinking a lead, and if a lost article of value be found, it may be fished up by grapplings, or otherwise. A convenient size of a cylinder for this purpose, would be six feet high and three in diameter. The top cylinder head may be made convert for the sake of greater strength, in proportion to its weights: but the bottom may be made thick and heavy, without any disadvantage, and will tend to keep the cylinder in the right position.

National Association of Inventors.

On the evening of the 14th, this Association held its anniversary. A paper was read by the Secretary, giving an outline of a project to render the Association more useful to inventors—to raise funds to establish a warehouse for the sale of new inventions, provide workshops for the use of inventors, to open a museum of models, and to lay the foundation of a library. The assistance to be rendered inventors, was a condition of the Association becoming joint owner of the invention. Our friend, Col. Clark, thought the paper well written—sufficiently so for the pages of the Eureka. The writer was of a different opinion, and kept it for review and future consideration at a regular meeting.

ANNIVERSARY ADDRESS.

This was by Geo. Gifford, Esq. It was a lucid and well written discourse, and eloquently delivered. The subject was, The Property of Inventors. He clearly and forcibly pointed out the fact that a new and useful invention is as really property as any other claim of man. Unfortunately the public do not properly appreciate intellectual labor. They regard its production not as substantially property as that produced from physical effort. They erroneously look upon it as a favor bestowed. The inventor asks no favor; he simply demands justice; he claims as an absolute right, the enjoyment of the fruits of his own labor, whether of the mind, the hand, or both conjoined. Mr. G. beautifully and eloquently called into view the innumerable and varied blessings of enlightened society, and traced them to the ever-active and inventive powers of the mind. He depicted the toil, poverty, discouragements, and perseverance of inventors, true to their purpose as the needle to the pole. When they have overcome the ridicule of friends and foes, and surmounted every obstacle to invention, they are then met with the delay of Government, and pirates beset them on every side. His letters patent serve as a passport to legislation. Those in the business to which his invention pertains become his enemies. On every side he is obliged to defend himself. Finally his fate is decided by 12 jurors, unacquainted with the subject, and as much befogged as enlightened by counsel and court. The evils with which inventors have to contend may be traced principally to the rough, and improper views of the public in relation to the property of invention. It will be in vain to modify laws, while public opinion is radically wrong. It is like constructing a dam across a river, whose waters are sure to accumulate until the whole is swept away by its mighty and overwhelming force. The public are wrong in regarding the inventor's claim as a favor bestowed, in looking upon it as a monopoly, and in not treating him as a thief who deprives his fellow creature of that which has cost so much labor of both body and mind, and upon which, all the living of the inventor has been expended and all his hopes suspended. Mr. G. next pointed out the cause of this erroneous and ingenious opinion or impression of the public. He went back to the sports of Greece when the crown of honor was *bestowed*, when all improvements and discoveries were considered to belong to the nobles and sovereigns, and when rewards were given as an expresson of royal favor. He proceeded from these to special grants and monopolies in trade with which new discoveries were improperly associated. He then in a very clear manner pointed out the distinction between a monopoly and an invention, and showed that the latter had no properties of the former—that in the exclusive claim to an invention no one was deprived of that which he had before or which was common to all. It was absolutely and *bona fide* the property of the inventor.

The laws of Congress are passed to *secure* the rights of inventors, not to grant them favors.

Mr. G. was frequently interrupted by hearty applause.

We hope the address will be scattered from Maine to the *Neuces*, thence to the shores of the Lakes, and continue to spread over the land until the moral sense of the community is enlightened. S. F.

An excellent bed of Iron Ore is said to have been found in Dodge county, Wisconsin.

Important from Mexico.

The report is current—on what purports to be authority entitled to credit,—that Santa Anna is on his way to meet Gen. Taylor, with 20,000 to 30,000 men, and has probably ere this reached Monterey. Ampudia was aware of this, and hence his policy in insisting on an armistice *till* it should be otherwise ordered by either Government. Our General having been thus overreached, may possibly be taken comparatively by surprise and overpowered; though we cannot think it possible he should be caught napping. And with the superior skill of the American Artillery, if Gen. Taylor had two days notice of the approach of Santa Anna, he would put Monterey in a position to defy even 30,000 Mexicans, until reinforcements could arrive. There is much anxiety on the subject, nevertheless, and the American Executive is in danger of becoming unpopular in consequence of its tardy, indecissive and inefficient movements in the prosecution of the war.

The Ship "New World."

A new ship bearing this name, has been recently built and rigged at East Boston, Mass., and arrived at this port on Saturday last. She is said to be the largest merchant ship that floats on any water; being of 1500 tons measurement and well proportioned. A great many improvements have been introduced on board this ship, which make her an interesting study for nautical men. Her model is superior, and although she will doubtless carry a heavy cargo, it is evident to an unpracticed eye that she will prove a rapid sailer. Her spars are well proportioned—not too ponderous—and calculated, evidently, to bear a heavy press of canvass in tempestuous weather. Each of her lower masts is a single stick—her mainmast measuring thirty-three inches in diameter. She is intended as a regular liner between this port and Liverpool.

Since the above was in type, we have visited this mammoth ship, and experienced agreeable admiration at her symmetry and the new and judicious improvements on her deck, as well as by her extraordinary size. She is truly a great maritime curiosity.

Invasion of Tampico.

It is reported from Washington, that 1000 regulars and 400 volunteers, under command of Gen. Patterson, are to be landed by the Gulf Squadron at Tampico, and are to commence the invasion of Mexico from that point.

News from Oregon.

A gentleman has arrived at Oxford, Ohio, from Oregon, which place he left on the 13th of May. He reports that the American emigrants are healthy, and generally well satisfied with their new homes. He brought 125 letters, and met five hundred wagons while on his way; some going to Oregon and others to California.

The Steamer Isaac Newton.

This new and splendid vessel, which has been in motion several days, and should have been noticed earlier, is a steamer of the first class, and may be reckoned among the *ne plus ultras*. She is 320 feet long, 30 feet wide on deck, and propelled by an engine of 1000 horse powers. Her measurement is 1200 tons, and her style of finish and furnitures is unrivalled in splendor as well as convenience.

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Observations on the more recent Researches concerning the operations of the Blast Furnace in the Manufacture of Iron.

BY DR. J. L. SMITH.

[*Concluded from No. 4.*]

4. *Composition of the gas in various parts of the furnace during its operation.*—The analysis lately made by Ebelman are the most accurate and best detailed that we are in possession of. What follows has reference to a furnace worked with charcoal.

Gas taken from the mouth of the furnace and dried:—

Carbonic acid,	12.88
Carbonic oxide,	23.51
Hydrogen,	5.82
Nitrogen,	57.79

The vapor of water in a hundred columns of this gas, varies from nine to fourteen volumes. Examinations made at different times show the proportion of hydrogen to be nearly uniform, and that the sum of the volumes of carbonic acid and carbonic oxide is constant, but that there is a variation in their respective proportions.

Gas taken from the interior of the fire-room, at 5 to 10, and 13 to 17 feet from the mouth, (fire-room 36 feet.)—From five to ten feet the proportion of moisture diminishes, the other ingredients remaining about the same. From 13 to 17 feet, the proportion of carbonic oxide increases, while the carbonic acid and hydrogen diminish.

Gas from the bottom of the fire-room and top of the boshes.—This is remarkable for the constancy of its composition, and for the absence of carbonic acid and watery vapor.—Composition:—

Carbonic oxide,	35.01
Hydrogen,	1.92
Nitrogen,	63.07

Gas from the bottom of the boshes and commencement of the hearth:—

Carbonic acid,	0.31
Carbonic oxide,	41.59
Hydrogen,	1.42
Nitrogen,	56,68

Gas from the neighborhood of the tuyer:

Carbonic oxide,	51.35
Hydrogen,	1.25
Nitrogen,	47.40

The two last statements would appear to contradict the rules previously laid down, as regulating the operation of the blast furnace; for, according to them, the proportion of carbonic oxide, at the top of the boshes, should be a little greater than in the hearth, whereas the reverse would appear to be the case by the analysis here given. Besides, from a glance at the composition of the three last gases alluded to, it would appear that the gaseous products, as they ascended the furnace, lost completely a portion of the carbonic oxide, without a replacement by carbonic acid or other compound; in other words, a portion of it would appear to be completely annihilated, which of course is an impossibility. This apparent anomaly is easily accounted for, when it is stated how the gas was collected.

In order to obtain the gas from different portions of the furnace, holes were bored into the side, and a tube inserted, by which it was collected.

In order to obtain the gas from different portions of the furnace, holes were bored into the side, and a tube inserted, by which it was drawn off. Allusion has already been made to the fact that a pasty mass adheres to the sides of the hearth, containing silicate of iron and charcoal, in which there is a constant reduction of the iron, with the formation of carbonic oxide. Now it is evident that the gas drawn off by a hole bored into the side of the hearth, will be largely mixed with this carbonic oxide forming in the immediate neighborhood of the opening, and that it cannot serve as an index to the character of gas passing through the centre of the hearth. M. Ebelman was aware of this fact, but he was not able to overcome the difficulties in the way of obtaining the gas under the proper circumstances.

Gas taken at the tuyer.—Here it is little else than atmosphere mixed with a few per cent. of carbonic acid.

From these results it will not be difficult to admit, that the oxygen of the air is converted immediately into carbonic acid, which is rapidly changed into carbonic oxide, under the influence of an excess of carbon, and the high temperature developed near the tuyer.

5. *The causes that render necessary the great heat of the blast furnace.*—The weight of the ore, flux, and combustible, which enters the furnace, being only one half that of the ascending column, and as the specific heat of these three materials is very much below that of the gas of the ascending mass, it is not the heating of them that explains the necessity of the very great heat of the blast furnace. But the principal cooling causes are,—

1. The drying of the ore, flux and coal, and the expulsion of carbonic acid from the flux, etc., rendering much of the heat latent; for what was solid is now transformed to the gaseous state.

2. The reduction of the ore, or in other words, the transformation of the solid oxygen of the ore into gaseous oxygen. If the ore has been deprived of its oxygen by the action of carbonic oxide, with the formation of carbonic acid, the heat rendered latent by the oxygen, is compensated for by the heat developed by the reaction between the oxygen and carbonic oxide; which is the character of the operation that principlly takes place in the lower part of the fire-room. If the ore has been deprived of its oxygen by the direct action of the coal, the amount of heat rendered latent is enormous, as already stated; for carbonic oxide is the result of this reaction, and the amount of heat developed by it falls short of that rendered latent by the oxygen that has entered into its formation, assuming the gaseous condition,—this is the character of the reduction taking place in the boshes and hearth.

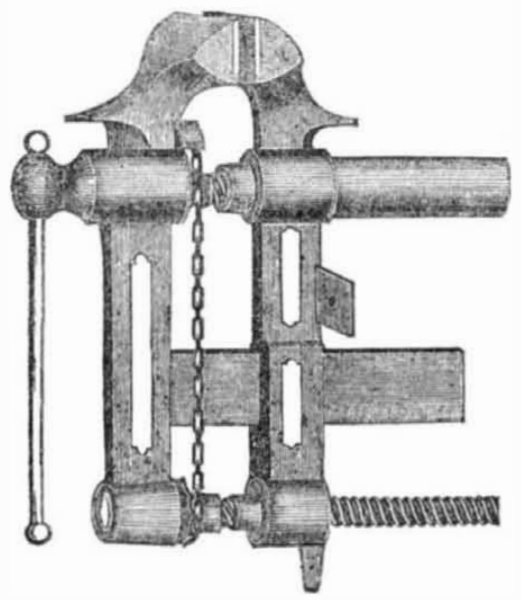
3. The conversion of the carbonic acid near the tuyer into carbonic oxide has a powerful influence in cooling the upper part of the hearth; for of the 6260 units of heat formed, by the first action of the air upon the coal, 4662 are rendered latent by the conversion of this carbonic acid into carbonic oxide.

This terminates what it was proposed to treat of; it is little else than a sketch of the chemistry of the blast furnace, sufficient to shew its importance.

A flourishing town in England.

The rapid growth of manufacturing villages is not unknown in England, though less frequent than in this country. The town of Crewe, in Cheshire, 166 miles from London, contained less than a dozen houses seven years ago, but now numbers upwards of 500 houses, and nearly 300 more are in progress. This rapid growth is in consequence of the junction of railroads.

MATTHEWS' PARALLEL CHAIN VICE.



EXPLANATION.—The peculiarity of this excellent improvement, consists in the use of two equal screws, placed parallel, one above the other, and connected by an endless chain, so as to insure a corresponding motion in each. By means of this arrangement, the two jaws of the vise are kept in an uniformly parallel position, and consequently hold any object with an uniform gripe, and much more firmly than those of ordinary construction. The proprietor of this improvement—Messrs. M. Fisher and Wm. Martin, Jr.—manufacture the vises of various sizes and capacity, at their manufactory, in Newport, Me. They are made from the choicest iron, with cast steel jaws, perfectly welded, and are warranted by the manufacturers to be at least equal in strength and durability, to any other vises in use, of corresponding size and weight; and every dealer or purchaser, is allowed to return the same, and receive the purchase money back, if the vises fail to give satisfaction. Messrs. Clark & Wilson, No. 5 Platt st., are appointed agents for the sale of the article in this city, and we can see no reasonable doubt that the improvement will come into immediate and extensive use. A specimen may be seen at this office.

National Boasting.

Of the seige of Monterey, the Philadelphia Ledger says: "Six-thousand men, marching up hills and climbing rocks, stormed intrenchments and captured a castillated city, defended by 12,000 men. Does European warfare show an achievement more brilliant? When and where was it performed? The best British troops, who boasted of having beaten Napoleon's *invincibles* in Spain, and therefore called themselves Wellington's *invincibles*, could not capture New Orleans, defended by a breastwork outside, manned by American militia. But American regular troops and militia did capture Monterey, defended from intrenchments without, and streets and fortified houses within, by the best troops of Mexico, double of themselves, in numbers. Had 6000 American troops manned the intrenchments, streets, and castles of Monterey, 12,000 British regular troops could not have stormed them."

Lectures to Office Seekers.

The first necessary qualification towards obtaining a fat office is impudence, and the second is impudence, and the third also, and the fourth likewise. No modest man ever did, or ever will make a fortune, or anything else, unless he makes an ass of himself. Lord Halifax, Sir Robert Walpole, Martin Van Buren, and, in fact, all other instances of rapid advancement, have been more remarkable for their impudence and assurance than any other trait in their respective characters. The door that leads to greatness is a very small one, and there is always a great crowd outside, shoving and thrusting who shall be foremost; people who knock others with their elbows, disregard a little kick of the shins, and still thrust heartily forward, are sure of a good place. Your modest man stands behind in the crowd, is shoved about by everybody, his clothes torn, almost squeezed to death, and sees a thousand get in before him who don't know a tithe of what he does, and yet, still know enough to overshadow him and collapse him.

Ingenious Device.

A French gentleman, travelling in his cabriolet from Paris to Calais, was accosted by a man walking along the road, who begged the favor of him to put his great coat, which he found very heavy, into his carriage.

with all my heart," said the gentleman but if we should not be travelling to the same place, how will you get your coat?"

"Monsieur," said the man, with great gravity, "*I shall be in it!*"

HUMOROUS.

Great Curiosities.

Some enterprising gentlemen talk of establishing a new museum. They have alread collected a great many curiosities, among which are the following:—

A piece of the "Philosopher's Stone."

A corner of Othello's handkerchief.

Some of the hairs of the animal Lock saw in the moon.

A certain cure for the rheumatism.

A bottle of the water through which Leander swam when he crossed the Hellspont.

A brick from the house that Jack built.

Cinderella's glass slipper.

Col. Pluck's commission.

A feather from Poe's Raven.

One of the prongs of Neptune's trident.

Specimen's of Glue made from the horns of a dilemma.

A walking cane made out of the North Pole.

The E flat key of the trumpet of fame.

The handle of the Odd Fellow's gridiron.

The wings of the Flying Dutchman.

The unfolded tale of Hamlet's daddy's ghost.

A stone from the mountain that brought forth a mouse.

The tail of the night-mare.

A spoke from the wheel of fortune.

An oath sworn by the army of Flanders.

The tail of the fox that would not eat the grapes.

Tar scraped from the deck of the ship of State.

One of the shoes of Alexander's horse Bucephaus.

The basin in which Macbeth washed his hands after killing Duncan.

A claw of a bug bear.

A lock of the hair of the "Oldest Inhabitant"—very grey.

This we consider to be a very fair beginning in the way of antiquities. We will announce the articles as they are in future handed in to the proprietors.—[Ex. paper.

Murdering Language.

To us it appears among the unaccountables that so large a portion of otherwise well informed people in this city, persist in the improper application of the V and W in conversation in the English language. The habit is not only ridiculous but decidedly contemptible,—and the indulgence therein generally implies a foolish desire to appear ridiculous, rather than any irresistible habit. The following examples will suffice to illustrate the beauty of this impropriety.

"Villiam, I vant my vig."

"Vich vig, sir?"

"Vy, my vite vig in the vig-box, vitch I vore last Vednesday vas a veek, ven I vent to the vidow Vaddle's vedding."

Do you know Mr. Wan Wooris, that several wery wile wagabonds came up to the westry from the wessels at the foot of Wesey street, to wote for Mr. Wincent, for Wice President. How wery wulgar.

Making American Citizens.

"O, blud an nouns, what a burnin' shame it was," said an Irishman yesterday, "to impaych Judge Elliot for maykin' daycint min Amerikin citizens afther bein' three years in the counthry, and now here's Gineral Karney maykin' Amerikin citizens by the thousands of these durty foreign Mixicans that niver put foot in the United States, at all, at all.

A popular but conceited middle aged lawyer, not much indebted to nature for his personal appearance, was cross-examining a young female witness, concerning the age of a third person; and in order to test her judgment in such matters, enquired "how old should you take me to be?" To which the witness promptly replied "From your appearance, sixty—from your question, sixteen."

Somebody defines a "fanatic" as one who sees and believes everything except what is real and rational; a miserable victim of a pressgang of harem-scarum ideas.

The difference between a lawyer and an attorney is said to be the same as that between a crocodile and an alligator.

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Proclamation of Commodore Sloat.

Now that the salubrious and fertile country of California is considered as bonafidely constituting a part of the United States, we cannot but believe that the proclamation of Com. Sloat on the occasion of taking possession (?) of the country, will be particularly interesting and acceptable to our readers. It is truly surprising, and reflects considerable credit on those engaged in tranmitting the intelligence, that the Commodore should have been advised of the war at so early a date.

TO THE INHABITANTS OF CALIFORNIA.

The Central Government of Mexico having commenced hostilities against the United States of America, by invading its territory and attacking the troops of the United States stationed at the North side of the Rio Grande, with a force of seven thousand men, under the command of General Arista, which army was totally destroyed and all their artillery, baggage, &c. captured, on the 8th and 9th of May last, by a force of two thousand three hundred men, under the command of Gen. Taylor, and the city of Matamoros taken and occupied by the forces of the United States.

The two nations being actually at war by this transaction, I shall hoist the standard of the United States at Monterey immediately, and shall carry it throughout California.

I declare to the inhabitants of California, that, although in arms with a powerful force, I do not come among them as an enemy to California, but, on the contrary, I come as their best friend, as henceforward California will be a portion of the United States, and its peaceable inhabitants will enjoy the same rights and privileges as the citizens of any other portion of that nation, with all the rights and privileges they now enjoy; together with the privilege of choosing their own magistrates and other officers, for the administration of justice among themselves; and the same protection will be extended to them as to any other State of the Union.

They will also enjoy a permanent government, under which life, property, and the constitutional rights and lawful security to worship the Creator in a way most congenial to each one's sense of duty, will be secure; which unfortunately, the Central Government of Mexico cannot afford them, destroyed as her resources are by internal factions and corrupt officers, who create constant revolutions to promote their own interests and oppress the people. Under the flag of the United States California will be free from all such troubles and expenses. Consequently the country will rapidly advance and improve, both in agriculture and commerce, as of course the revenue laws will be the same in California as in all other parts of the United States free from duty, and all foreign goods at one-quarter of the duty they now pay. A great increase in the value of real estate and the products of California may reasonably be expected.

With the great interest and kind feelings I know the Government and people of the U. States possess towards the citizens of California, the country cannot but improve more rapidly than any other on the continent of America.

Such of the inhabitants of California, whether natives or foreigners, as may not be disposed to accept the high privilege of citizenship, and to live peaceably under the free government of the United States, will be allowed time to dispose of their property, and to remove out of the country if they choose, without any restriction; or to remain in it, observing strict neutrality.

With full confidence in the honor and integrity of the inhabitants of the country, I invite the judges, alcades, and other civil officers to retain their offices, and to execute their functions as heretofore, that the public tranquility may not be disturbed, at least until government of the territory can be more definitely arranged.

All persons holding titles of real estate, or in quiet possession of lands under color or right, hall have their titles and right granted to them. All churches, and the property they contain, in possession of the clergy of California, shall continue in the same rights and possession they now enjoy.

All provisions and supplies of every kind, furnished by the inhabitants for the use of the United States ships or troops, will be paid for at fair rates, and no private property will b taken for public use without just compensation at the moment.

JOHN D. SLOAT,
Commander-in-Chief of the U. S. Naval Forces in the Pacific Ocean.

UNITED STATES SHIP SAVANNAH, *Harbor of Monterey, July* 5, 1846.

A Touching Scene.

A French paper says, Lucilla Romee, a pretty little girl, with blue eyes and fair hair, poorly, but neatly clothed, was brought before the Sixth Court of Correction, under a charge of vagrance. "Does any one claim you?" said the magistrate. "Ah, my good sir," she replied, "I have no longer any friends: my father and mother are dead. I have only my brother James, but he is as young as I am.—Oh, dear! what could he do for me?" "The court must send you to the house of correction." "Here I am, sister—here I am: do not fear," cried a childish voice from the other end of the Court. And at the same instant a little boy, with a sprightly countenance, started forth from the midst of the crowd, and stood before the magistrate. "Who are you?" said he. "James Romee, the brother of this poor little girl." "Your age?" "Thirteen." "And what do you want?" "I come to claim Lucilla." "But have you, then, the means of providing for her?" "Yesterday I had not, but now I have. Don't be afraid, Lucilla."—Lucilla: "Oh! how good you are, James!" Magistrate, to James: "But let me see, my boy; the Court is disposed to do all they can for your sister. However, you must give some explanation." James: "About a fortnight ago my poor mother died of a bad cough, for it was very cold at home. We were in great trouble. Then I said to myself, I will become an artizan, and when I know a good trade I will support my sister. I went apprentice to a brush-maker. Every day I used to carry her half my dinner, and at night I took her secretly to my room, and she slept in my bed while I slept on the floor wrapped in my blouse. But it appeared the little thing had not enough to eat, for one day she unfortunately begged on the Boulevard. When I heard she was taken up, I said to myself, come, my boy, things cannot last so; you must find something better. I very much wished to become an artizan, but at last I decided to look for a place; and I have found a very good one, where I am lodged, fed and clothed, and have 20 francs a month. I have also found a good woman, who, for these 20 francs, will take care of Lucilla, and teach her needle work.—I claim my sister." Lucilla, clasping her hands: "Oh, how good you are, James!"—Magistrate, to James: "My boy, you conduct is very honorable. The court encourage you to persevere in this course, and you will prosper." The court then decided to render up Lucilla to James, and she was going from the bar to join her brother, when the magistrate, smiling, said: "You cannot be set at liberty till to-morrow." James: "Never mind, Lucilla, I will come and fetch you early to-morrow." To the magistrate: "I may kiss her, may I not, sir?" He then threw himself into the arms of his sister, and both wept warm tears of affection.

To Correspondents.

T. C. H. of New Bedford, has our thanks for his communication, although we cannot readily see the practicability of the plan of machinery by him submitted.

We would say to W. W., of Frankstown, that we approve the principle of his invention, and should be glad to have a more definite description.

J. R. G., of Windsor,—press of business has caused delay in furnishing the intelligence required—will attend to it soon.

J. L. H., of Norfolk,—in our next.

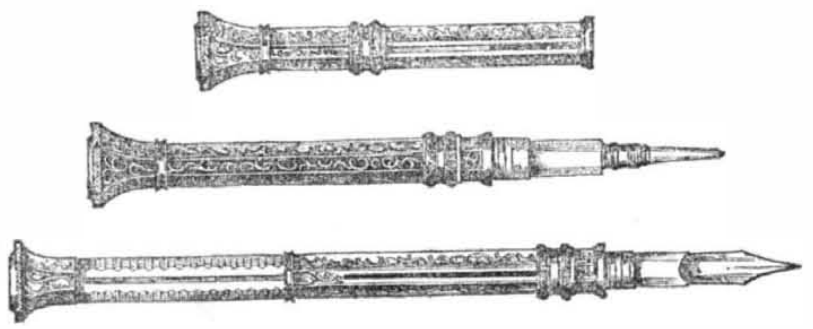
W., of Boston, is out at all points.

S. D. P., of Lynn—we cannot republish, but will send *him* such back Nos. as he requires.

A. P., of Wolfsboro'—a similar plan has frequently been talked of, but is thought too expensive. We shall re-examine the subject, however.

A. H., of Salem—letter transferred to the Mechanics' Agency, 34 Ann street.

J. S., of Ashby—galvanic engine, improved, nearly completed, and we shall give particular notice.



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In the short space of 2 3-4 inches is contained a Pen, Pencil, and a reserve of leads, and by one motion slides either the pen or the pencil out and extends the holder to six inches, which is but little more than half the length, when shut up, of the common pen holder, but when extended is one fourth longer. This article is secured by two patents, and the Manufacturers are now ready to receive orders for them in any quantity, either of Gold or Silver, together with his celebrated ever pointed Gold Pens, which need no proof of their superiority except the increased demand for the last six years, and the numerous attempts at imitation.

A. G. BAGLEY, No. 189 Broadway.
New York, Sept. 1, 1845. o24 tf

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To those desiring Drawings or Specifications, Mr. B. has the pleasure of referring to Gen. Wm. Gibbs McNiel, Civil Engineer, Prof. Renwick, Columbia College, Prof. Morse, Jno. Lee.

Residence, No. 10 Carroll Place; office, No. 23 Chambers street. oct10 tf

COPPER SMITH!—The subscriber takes this method of informing the public that he is manufacturing Copper Work of every description. Particular attention is given to making and repairing LOCOMOTIVE tubes. Those at a distance, can have any kind of work made to drawings, and may ascertain costs, &c., by addressing L. R. BAILEY, cor. of West and Franklin sts., N. Y.

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GENERAL PATENT AGENCY.—The subscriber has established an agency at his warehouse, 12 Platt street. New York, for the protection and general advancement of the rights and interests of Inventors and Patentees.

The objects of this agency are more particulary to aid and assist Inventor sand Patentees in effecting sales of their inventions and of goods and wares made therewith—and also for the sale and transfer of Patent Rights.

Arrangements have been made with a lawyer familiar with the Patent Laws, who will attend to the legal branch of the business upon reasonable terms. Satisfactory references will be given. Applications may be made to the undersigned personally, or by letter, post paid. SAMUEL C. HILLS,
45-2dv6* General Patent Agent.

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SMITH'S CELEBRATED TORPEDO, OR VIBRATING ELECTRO MAGNETIC MACHINE—This instrument differs from those in ordinary use, by having a third connection with the battery, rendering them much more powerful and beneficial. As a CURIOUS ELECTRICAL MACHINE, they should be in the possession of every one, while their wonderful efficacy as a medical agent, renders them invaluable. They are used with extraordinary success, for the following maladies.

RHEUMATISM—Palsy, curvature of the Spine, Chronic Diseases, Tic-doloureaux, Paralysis Tubercula of the brain, heart, liver, spleen, kidneys, sick headache.

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These machines are perfectly simple and conveniently managed. The whole apparatus is contained in a little box 8 inches long, by 4 wide and deep. They may be easily sent to any part of the United States. To be had at the office of the Scientific American, 128 Fulton st, 2nd floor, (sun building) where they may be seen IN OPERATION, at all times of the day and evening. 2

BRASS FOUNDRY.

JAMES KENNEARD & CO. respectfully inform their friends and the public that they are prepared to furnish all orders for Brass and Composition Castings, and finishing in general at the shortest possible notice.

N. B. All orders for Rail Road, Factory and Steamboat work from any distance, will be thankfully received and attended to with despatch and on reasonable terms.

☞ Patterns made to order.
JAMES KENNEARD & CO.
oct. 10 3m* 27 1-2 Chrystie st New York.

☞ NOTICE—R. C. WETMORE & CO. RETURN their thanks to the Fire Department and Police, for the zealous exertions used by them in saving the property in the store No. 85 Water street, at the fire this evening.

R. C. Wetmore & Co desire especially to acknowledge the aid of his honor the Mayor, in preserving their books and papers.

Tuesday Night.

PROSPER M. WETMORE, Navy Agent, begs to return his grateful acknowledgment to his Honor the Mayor,, the members of the Fire Department, and Municipal Police, for the assistance rendered him in saving all the books and papers of the Navy Agency from the fire this evening, Tuesday night.

NOTICE.

The Office of the Navy Agent is removed for the present to the back office of the store No 11 Broad st. PROSPER M. WETMORE, Navy Agent.

☞ All city papers please copy, and send bill. o10 3t

STATE OF NEW YORK.

SECRETARY'S OFFICE, ALBANY, July 24, 1846.

TO the Sheriff of the City and County of New York: Sir—Notice is hereby given, that at the next General Election, to be held on the Tuesday succeeding the first Monday of November next, the following officers are to be elected, to wit:—A Governor and Lieutenant Governor of this State. 2 Canal Commissioners, to supply the place of Jonas Earll, junior, and Stephen Clark, whose terms of service will expire on the last day of December next. A Senatsr for the First Senatorial District, to supply the vacancy which will accrue by the expiration of the term of service of John A. Lott on the last day of December next. A Representative in the 30th Congress of the United States for the Third Congressional District, consisting of the 1st, 2d, 3d, 4th and 5th Wards of the City of New York. Also a Representative in the said Congress for the Fourth Congressional District, consisting of the 6th, 7th, 10th and 13th Wards of said City. Also a Representative in the said Congress for the Fifth Congressional District, consisting of the 8th, 9th and 14th Wards of said city. And also a Representative in the said Congress for the Sixth Congressional District, consisting of the 11th, 12th, 15th, 16th, 17th and 18th Wards of said City.

Also the following officers for the said County, to wit: 16 Members of Assembly, a Sheriff in the place of William Jones, whose term of service will expire on the last day of December next. A County Clerk in the place of James Conner, whose term of service will expire on the last day of December next, and a Coroner in the place of Edmund G. Rawson, whose term of service will expire on the last day of December next. Yours, respectfully,
N. S. BENTON, Secretary of State.

SHERIFF'S OFFICE, New York, August 3d, 1846.

The above is published pursuant to the notice of the Secretary of State and the requirements of the statute in such case made and provided for.
WM. JONES, Sheriff of the City and County of New York.

☞ All the public newspapers in the County will publish the above once in each week until election, and then hand in their bills so that they may be laid befo rethe Board of Supervisors, ahd passed for payment.

See Revised Statutes, vol. 1, chap. vi. title 3d, article 3d—part 1st, page 140. aug18

Engraving on Wood

NEATLY AND PROMPTLY EXECUTED AT the OFFICE OF THE SCIENTIFIC AMERICAN, 128 Fulton st, three doors from the Sun Office. Designs, DRAWINGS of all kinds for PATENTS, &c., also made, as above, at very low charges. 1

BLACK LEAD POTS!—The subscriber offers for sale, in lots to suit purchasers, a superior article of BLACK LEAD POTS, that can be used without annealing. The price is low, and founders are requested to make a trial. SAMUEL C HILLS,
45to2ndv6 Patent Agent, 12 Platt street.

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Astral Chronometers.

We notice among the many articles of genius and art exhibited at the Fair, an astral Chronometer and general Surveying Instrument, the invention of William Jones, No. 275 Spring street, New York. In it is connected many of the most used mathematical instruments, say the compass, quadrant, telescopes, &c. &c. &c., all working well together for their several uses and purposes in the line of angular survey either vertical or horizontal. But the most useful and novel part of the invention and the part least known, is the front dial plate consisting of 5 or 6 counter sunk circular plates, with graduated concentric circles thereon, representing the celestial and terrestial globes, by which the true mean or astronomical time may be had at any moment when the stars are visible, and thereby correct the solar time. As clocks or watches regulated by the sun are scarcely ever correct without having recourse to equation tables, to know when to add to, or subtract from, the time indicated by the sun, we understand this instrument is constructed and calculated so as to indicate the transit of some particular star across the meridian at a certain moment of time for every day in the year,—consequently, the time at any place in the circle of progression, with ease and correctness, will be shown. We also understand that the American Institute very judiciously and wisely awarded to the inventor, at the last Fair, a silver medal, for which he returns them his cordial thanks. He thus avers that its essential principles and developments, as to time, have never yet been properly studied or known by any man of science. Such things as this should not be passed over with a casual glance, nor should their value be depreciated without knowledge of their merits or demerits, whatever they may be. Notices of this instrument, inserted in some of our papers at the last Fair, have been copied into several of the British and Irish papers, and much esteemed and highly appreciated there.

New Method of Blasting Rocks with Gunpowder.

The expense attending the common mode of blasting in mines and quarries, induced M. Carbebossse to commence experiments on the quantity of rock removed by a certain portion of powder, in proportion to the size of the cavity, and he finds that by the formation of chambers or cavities, instead of the round cylindrical hole commonly made, a much more safe and economical result is effected. The experiments were made on a hard calcareous rock, in which, after making a circular hole in the usual method, hydro-chloric acid and water was poured in through a copper funnel three yards long, three several times, at proper intervals, as the decomposition of the rock proceeded; it was generally allowed to remain two hours, when a sufficient sized cavity was formed at the bottom of the hole to receive a large charge of powder. The remaining liquid was removed by introducing small pistons into the hole five inches long, with valves opening upwards, and acting similarly to pump valves. Tow was afterwards introduced, and turned about to dry the rock. and then drawn out; powder is poured in until the chamber is two-thirds full. Upon this one of Bickford's fuses is placed; it is then filled up with powder, and the whole tamped with sand, when it is ready for firing. The explosion takes place without either flash or detonation —a dead rumbling only is heard from the cracking rock—the whole mass is seen to tremble, then rise a little, and again to fall, cracked in every direction. The rock being detached in larger masses by these means, are not thrown to a distance, but merely removed. and the gases expanding to their full extent, before they escape into the atmosphere, do not detonate. By these means, the operation only costs 5d. per yard cube, while by the old method the expense is from 2s. 6d. to 3s. 6d.—[Mining Journal.

A new steamer built in Delaware on a trial sailed six miles at the rate of 28 miles an hour, and such is her construction that it is said she will run 30 miles an hour.

An Extensive Factory.

Wilmer & Smith's European Times gives an account of the laying of the foundation stone of an extensive steam factory at Davenport, England, for the building, repairs and equipment of steam vessels, the manufacture and repairs of steam engines and machinery, and for other purposes connected with the multiplication and preservation of the royal steam navy of Great Britain.

The total area of ground which is to be included in the establishment will be about 75 acres. The contractors have now employed on the works 750 men, 110 horses, 3 steam engines, with 12 miles of railway; 630,000 cubic feet of stone (granite and lime stone) are on the ground, and they are working seven of the principal quarries of the country. The works will progress with the greatest rapidity, and it is expected that a steamer will be admitted into one of the basins within three years and a half from this time. The coffer dam which the enterprising contractors, Messrs. Baker & Son, have undertaken on their own responsibility, is 2000 feet long, within which the sea wall of the same length is to be built. There will be two immense basins, the North Basin 650 feet by 625 feet, and the South Basin 625 feet by 560 feet, each having a depth of 27 feet of water at all times, and will allow 18 first class vessels to be fitted out, or 25 of all classes, exclusive of those in the docks. The two basins contain 16 acres. There will be three large docks; one (the North Dock,) 300 feet long by 94 feet wide, for the first rates; another 406 feet long by 82 feet wide, for the largest steamers; and the third (the South Dock) 300 feet long by 82 feet wide. The entrance lock is so contrived as to permit steamers to be docked at low water, having 18 feet at low water spring tides; and it can be made either a lock or a dock, as might be required. The factory is to contain every description of machinery for repairing steam engines, and will be 800 feet long by 300 feet broad. The boiler house, rigging and store house, will be in the same building.—Such will be the complete efficiency of the establishment, that a vessel will be taken in hand, and passed from one department to another, in succession, so as to be ready for sea when she is ready to leave the basin.

A Coach under Sail.

The New Orleans Bulletin gives the following description of a novel vehicle, in use on Galveston Beach, in Texas, viz: "A coach propelled by the wind. The vehicle is constructed with four wheels, the front ones being much wider apart than those behind, and on them rests a body like that of an omnibus. In front is the mast, on which the mainsail is placed, and where the tongue of an ordinary carriage is, is a bowsprit for the jib. It is steered by an apparatus which directs the hind wheels. The beach on Galveston Island is as level as a floor, and hard almost as a stone, and when there is a fair wind, the carriage runs at rail road speed. When the trade winds prevail, the wind blowing then from the southeast, it runs from one end of the island to the other, and back with the utmost facility." Unfortunately there are few tracts of country which present a natural surface smooth enough to admit of the use of this species of motive power, unless it be covered with water.

Preserving Timber.

S. W. Jewett of Vermont, impregnated in 1833, a stick of basswood timber, (which decays more rapidly than nearly all other kinds of wood, with a solution of blue vitriol; it was green, cut in June. It was partly buried in the ground, and exposed to constant alternations of moisture and dryness. In eleven years "it was, to all appearance, as sound as when first impregnated. The remaining portion of the tree unimpregnated, had decayed years before."

Terrifying Rats.

Dissolve a pwt. of phosphorus in one-fourt of a gill of olive oil, which may be done by applying a gentle heat, and whatever substance is smeared with this compound, will appear luminous for several hours. It is said that if a live rat be coated over with this minous oil, and then set at liberty, all the rats in the vicinity will immediately absquatulate to parts unknown, and never return.

Interesting Items in History.

The earth and system of nature, were created B. C. 4155 in the autumn: the trees and plants were creared bearing fruit. There was rejoicing in heaven on the occasion, and the time is supposed to correspond with the time of the Jewish Feast of Tabernacles when all the Jews were required to rejoice seven days.

The flood came on the earth in the Autumn of B. C. 2500: and in the autumn of B. C. 4500, on the anniversary of the creation, Noah removed the covering from the ark, and beheld dry land, and without doubt, rejoiced with his family on the occasion.

About the year B. C. 900, at the same season, that is, on the 15th day of the 7th month, the splendid and sacred Temple of Jerusalem, was dedicated, and the bright glory of God filled the Temple, and the people rejoiced seven days.

At the same time of the year, B. C. 455 the Medo-Persian king, Ahasuerus (or Artaxerxes) issued a decree to restore and rebuild Jerusalem, and gave liberty to all the Jews to return to their own country: and in B. C. 406 the sacred Temple, being completed and the city rebuilt, the Jews observed the Feast of Tabernacles with great rejoicing, such as had not been since the days of Joshua.

In the autumn of the year B. C. 2 (probably on the 15th of the 7th month, but not ascertained,) the Savior was born and a multitude of the heavenly host was seen and heard rejoicing and giving glory to God. On the year following, an eclipse of the moon occurred, soon after which, Herod died; (having a little while before, slain all the children in Bethlehem, from two years old and under) and this event, according to Josephus, was thirty years after the battle of Actium. During this celebrated battle, which occurred in August, B. C. 31, and marked the commencement of the reign of Augustus Cæsar, the most remarkable eclipse of the sun on record occurred: and the time of its occurrence is fully established by astronomical calculations, as well as historical dates. Augustus reigned 44 years, lacking a few days, and at his death, the reign of Tiberius commenced, which was in A. D. 14: and this event was also marked by an eclipse of the moon, which occurred a few days after, and the date of the historical record thereof is confirmed by astronomical tables.

In the spring of the 15th year of Tiberius, which of course must have been in A. D. 29, John the Baptist came into the country about the river Jordan, preaching and baptising—being then 30 years old: for the Jewish law would not admit his entering on his ministry under that age. And in the autumn of the same year, Jesus being thirty years old, (for there was only about six months difference in their ages) was manifested as the MESSIAH: being baptised, and then visibly anointed by the Holy Spirit of God, and acknowledged by a voice from heaven. He soon after commenced preaching, and saying "The *time* is fulfilled," alluding to the 69 weeks or 483 years from the going forth of the *decree* before mentioned, according to Dan. 9: 27. This event must have occurred in the 7th Jewish month, (corresponding to our second autumnal moon) because his crucifixion occurred on the 14th of the first month, which event was predicted to take place in the midst (middle) of the 70th week, which must have been three and a half years from his manifestation as Messiah (or "Anointed"). This proves the crucifixion to have occurred A. D. 33, which point has been for many centuries unsettled.

Power of the Telegraph.

There has been a successful telegraphic communication made through the whole distance from Boston to Buffalo, 700 miles. So that two persons in these two cities may converse with each other as it were face to face, without delay or loss of time.

Insects.

It is stated by naturalists, that nearly all kinds of insects breathe through pores all over their bodies: wherefore a drop of oil being applied, closes these pores, and destroys the insect. Hence it is recommended that sweet oil be dropped into the ear of a person when any insect is known to have entered. It would be much more desirable, however, to drive, attract, or induce the insect to first quit the premises.

English Railroads.

A gentleman who has been for sometime travelling in Europe, reports that the railroad system in England is no way superior to that in the United States, though vastly more expensive. He says the track is, in general, in no better condition than ours and the regulations are not near as good. There is much more of confusion and hurly burly at the stations, and the trains are not exact to the time. Accidents are, also, more frequent than here. There are three grades of cars, in England.—The third are mere boxes without any cover or protection from the weather, and the price in them averages two cents per mile. The second class have a cover with wooden benches for seats without stuffiing or covers, and are made as uncomfortable as possible, to prevent people from riding in them. The first class cars are fine. They are richly trimmed, cushioned, and stuffed, and the average rate of fare in them is about *seven cents* per mile, or nearly three times as much as it is in New England.

Western Steamboats.

There have been built during the present year, at New-Albany, Louisville, Saint Louis, Cincinnati and Pittsburg, 108 steamboats, with an aggregate tonnage of 21,360 tons, and at a cost of 1,400,000. The Cincinnati Advertiser says, there are at this time, no less than 750 steamboats on the Western rivers, whose tonnage will not fall short of 160,000 tons, and which have cost in their construction and equipment, not less than $12,000.000.

A Fig Orchard.

There is in the town of Worthing, England, an orchard of fig trees, which produces annually about 1500 dozen of figs.

THE NEW YORK

SCIENTIFIC AMERICAN:

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The SCIENTIFIC AMERICAN is the Advocate of Industry and Journal of Mechanical and other Improvements: as such its contents are probably more varied and interesting, than those of any other weekly newspaper in the United States, and certainly more useful. It contains as much interesting Intelligence as six ordinary daily papers, while for *real benefit*, it is unequalled by any thing yet published Each number regularly contains from THREE to SIX ORIGINAL ENGRAVINGS, illustrated by NEW INVENTIONS, American and Foreign,—SCIENTIFIC PRINCIPLES and CURIOSITIES,—Notices of the progress of Mechanical and other Scientific Improvements, Scientific Essays on the principles of the Sciences of MECHANICS, CHEMISTRY and ARCHITECTURE,—Catalogues of American Patents,—INSTRUCTION in various ARTS and TRADES, *with engravings*,—Curious Philosophical Experiments,—the latest RAIL ROAD INTELLIGENCE in EUROPE and AMERICA,—Valuable information on the Art of GARDENING, &c. &c.

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